

POPULATION AND THE QUALITY
AND ACCESSIBILITY OF EDUCATION

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1. INTRODUCTION

Accounts of the development of education in Malaysia have generally focused on the equitable distribution of educational opportunities. Central to this discussion of educational equity is access to education by the population as a whole as well as different ethnic, regional and socio-economic groups. The debate on educational access and equity rages at all levels of the education system but is at its greatest intensity at the higher education level. Running parallel to the equity issue or often closely associated with it is the related issue of the quality of education. It is firmly believed that access to education without access to quality education fails to subscribe to the principle of equity.

Equal access to education refers to the availability of schooling without prejudice. It implies that formal schooling maybe availed of if desired by parents or children. It suggests that no legal barriers are placed in the way of a child intending to attend school. Regardless of factors such as sex, race and religion all children are provided a place in school. It furthermore ensures that any impediments to schooling are experienced equally by all members of the society. Among these may be parental/social prejudices which favour the schooling of boys against girls, geographical location which mitigates against rural children or a configuration of factors that favour the educational advancement of one ethnic or social group over another.

Access to education in any historical period may be measured by the school enrolment ratio which is defined as a ratio based on the number of pupils enrolled in primary and seconary schools compared to 100 persons in the population aged 5-19 years inclusive.* Proportion of population attending school, and rates of educational wastage may also serve as indicators of access to education. School achievement in terms of the proportion that reach a given level of education may also be taken as an indicator of access to education.

* B. Alfred Liu. "Population Growth and Education Development", Annals of the American Academy of Political and Social Sciences, 371 (Jan. 1967) pp. 109-120.

Quality of education is a more elusive term and more difficult to define. Performance in public examinations may be considered as a reflection of quality of education. Academic achievement, however, is often the symptom, the manifestation of the quality of education which may be credited to the presence of any of a large number of factors. Prominent among these may be physical facilities, instructional materials, quality of teachers, curriculum and the instructional or teaching-learning process. Even when no external measure of the quality of the products of a system is available, the term is used to refer to the general level of knowledge, skills and abilities that the products of the system have successfully acquired. In the final analysis it is measured by their productivity and performance in their place of work. More recently, the term quality in education refers to the acquisition of values among the school population.

Briefly, while access to education refers to the phenomenon of school attendance, quality of education refers to the total school experience. While access is measured in quantitative terms, quality is manifested indirectly and is often a matter of judgement.

Population or demographic factors closely affect both access to and quality of education. Education is seen not only as a basic human right but also as an avenue of social mobility. Rapid population growth makes demands on resources for the extension of educational facilities for the increasing number of children of school-going population. A high population growth coupled with the rising social demand for education have compelled governments to allocate increasing percentages of their budgets to education. As a consequence, governments have had to provide educational facilities to an increasing number of school-going age as well as provide for an increasing number of years of schooling that they will receive. At the same time, increasing population growth places pressure on other basic social amenities such as health and social services; the budget for education has to compete with other demands for scarce resources.

Other population characteristics that impinge upon issues of access to and quality of education are the geographical location of the population. A large rural population and a sparsely distributed population make access more difficult. The close alignment of social groups and ethnic groups

with factors that discourage acquisition of education may further compound the disadvantages. A high youth population seen as high youth dependency ratio have to be considered in providing educational opportunities. Most developing countries have a youthful population exacerbating the problem of providing educational facilities.

In considering access to schooling and the quality of education the rate of population growth is extremely important. To cope with the natural rate of growth national expansion must at least keep pace with the annual growth rate. In order to make a significant qualitative improvement access to education and investment in education must exceed the rate of growth.

2. THE HISTORICAL PERSPECTIVE

Three distinctive periods of growth should be distinguished in the development of education in Peninsular Malaysia. The first is the colonial period between 1874-1957, the second is the post-independence period between 1957 and 1969 while the third period commences with the statement of the New Economic Policy in 1970.

During the colonial period two parallel systems of education existed. The first was the vernacular education system with three types of schools, each having a different medium of instruction: Malay, Chinese and Tamil. Generally, each ethnic group attended the respective language medium primary school, where the child's mother tongue was the language of instruction. The other was the English school system which catered mainly for the children of the urban middle class of all races. However, the demographic patterns in the country enabled the non-Malays to benefit most from the English schools, which produced the white collar functionaries for the administrative services of the colonial government.

The ethnic based school system that evolved catered differentially to the needs of the ethnic groups resulting in their respective participation in different sectors of the economy. English education served primarily the British administration, the Malay elite as well as small groups of urban Chinese and Indians. The Malay system that was largely state sponsored aimed at "the bestowal of an elementary education such as would enable a villager to keep his simple records and to protect himself against petty swindlers"* and aspired to turn the Malays into better farmers or fishermen than their fathers. The Chinese system which was largely financed by the community itself displayed a heavy orientation and inspiration from China. It served the cultural needs of the Chinese and provided a work force for the Chinese business community. The Tamil schools functioned mainly in the rubber estates and provided an elementary school. Socially and economically only the English system facilitated movement into the modern sector, making it possible to seek work in the

* Quoted from J.S. Nagle (1928), Educational Needs of the Straits Settlements and Federated Malay States, Baltimore, pp. 106.

clerical and lower level administrative services besides providing a route to higher education available in Singapore and overseas. Hence the acquisition of English education became the prime target of persons interested in improving themselves socially.

During the post-independence decade a coherent national system of education was evolved. The Education Committee of 1956 and the Education Review Committee of 1960 distilled the primary features of the national education system. These were to comprise a common national (with the medium of instruction in Malay) and National-type (with the medium of instruction in English, Chinese or Tamil) schools with common content curriculum and common examinations. Over this period free primary schooling, the abolition of the primary school leaving examination, the introduction of comprehensive secondary schooling and the guarantee of a minimum 9 years of elementary schooling were introduced.

These changes were clearly intended to bring the benefits of schooling to as wide a population as possible. They were especially directed towards removing the imbalances among the different streams of schooling and inherent advantages enjoyed by English education in urban areas. Both greater access and better quality education were placed on the agenda of educational development. However, developments during the period until 1969 continued to favour the advantaged. Although in absolute terms educational facilities had been made available to larger numbers, relative to the immigrant group, the Malays felt that they were getting further behind. The socio-economic scenario did not reflect the new emphasis. In education particularly the Malays were unfavourably represented at the higher levels of the education system and in the more prestigious disciplines in the universities. Clearly a very important section of the population felt that it was not deriving maximum benefits from the educational expansion, in terms of access and was still relegated to an education system that was inferior in quality and channelled them into the less productive traditional sector of the economy.

Following race riots in 1969 the New Economic Policy was initiated with the twin objectives of eradicating poverty and restructuring society. Expansion of education was pivotal to the achievement of both objectives.

Through the extension of educational facilities to the hitherto disadvantaged groups it was expected that their movement into modern productive occupations would be facilitated. The two pronged approach consisted first of making access to education easier to the population as a whole and particularly those groups that had previously lagged behind and secondly, making education with a high premium for employment and further higher education more accessible. The latter approach would ensure that hitherto disadvantaged groups received competitive education.

In the assessment of education provision historically, two conclusions emerge. First, while it is conceded that impressive gains have been made in providing education, it is still felt that education has not been made equally accessible to all groups. Secondly, it is believed that the unequal access has been accompanied by differential quality. Those groups that have had greater access have also had better education, while those who have had less access have also had to tolerate access to poor quality education.

3. THE EDUCATION STRUCTURE

The present school system in Peninsular Malaysia is divided into four stages as follows:

- | | |
|--|-------------------|
| 1. Primary Stage | Standards I to VI |
| 2. Lower Secondary Stage | Forms I to III |
| 3. Upper Secondary or Post Comprehensive Stage | Forms IV to V |
| 4. Post Secondary Stage | Form VI |

A pupil who enters the education system at the age of 6 years can have an uninterrupted schooling for nine years, if he desires it. At the primary stage, education is free but not compulsory. Primary education is provided in one of three language media, namely Malay, Chinese and Tamil. Promotion is automatic during the primary stage, although the child appears for one centrally administered national examination. The standard V Assessment Examination is conducted for the purpose of measuring the pupils' attainment so that appropriate measures can be taken to correct the pupils' weaknesses in the final year of the primary school.

After six years of primary education, at the age of 11+, the pupils are promoted automatically to the lower secondary stage. A comprehensive type of education is provided for three or four years at this stage. Promotion at the lower secondary level is also automatic and the pupils appear for the Lower Certificate of Education or the *Sijil Rendah Pelajaran* (SRP) after 3 years (or 4 years in the case of those from Remove classes). On the basis of their performance, the children are promoted to Form IV and on the average about 60% - 65% qualified for promotion every year. Those who are not successful in getting places in the upper secondary schools may continue their education in private schools. This certificate also serves as the minimum qualification for appointments in both the public and private sectors. Those pupils who are selected for upper secondary education on the basis of their performances in the S.R.P. Examination are divided into three groups, the academic, vocational and technical. The vocational and technical schools are separately located and administered. At the end of two years, the academic group appears for the *Sijil Pelajaran Malaysia* (SPM) or Malaysian Certificate of Education (MCE). Those who

attend the secondary technical schools also sit for the MCE examination after two years but subjects taken have a technical bias. But those who enter the vocational schools appear for the Malaysian Vocational Certificate of Education Examination. Post secondary education is divided into arts, science and technical streams. At the end of two years pupils sit for the Higher School Certificate Examination or the Sijil Tinggi Pelajaran Malaysia (STPM) which serves as the basis for selection into the local universities and tertiary institutions overseas.

The formal education system, supported by public funds bears the main responsibility of educating the country's youths. However, there are private educational institutions which complement the work of the formal system by providing educational services from kindergarten to sixth form level. Since kindergartens are not available in the public education system, private enterprise meets this educational need. At other levels of education, these private institutions provide an opportunity for the drop-outs from the formal education system to continue their education. In 1970, 8% of the secondary enrolment was outside the government system, while at the primary level, the enrolment was negligible, that is below 1%. Enrolment for both primary and secondary levels combined, the percentage of private to government was 2.4% in 1970. This shows that the public educational system is meeting the demand for education quite satisfactorily.

4. ACCESS TO EDUCATION

This section will sketch the progress made in post-independence Malaysia in expanding educational opportunities generally and for different groups specifically. It will focus on the accessibility of schooling by level, sex, ethnicity and regions from the perspective of equity.

4.1 THE GROWTH of the SCHOOL SYSTEM

The Malaysian school system has expanded rapidly in the last twenty years. The data in **Table I** reflect the different emphasis placed on schooling at different times. In the early 1960s priority was given to universal and free primary schooling, but by the second half of the 1960s attention had shifted to expanding and diversifying the secondary school system in the form of the comprehensive schools. An expanded lower secondary system in turn led to a natural demand for places in the upper and post secondary schools. The rate at which the school system has expanded since 1960 may be gauged from **Table I**. At all levels of the education system expansion was most rapid during the decade 1960 - 1970. Expansion was especially intense at the secondary, post secondary and higher education level. During the 1970 - 1980 period primary school enrolments stabilised at around an annual increase of 2% per annum, but upper secondary, post-secondary and higher education extended considerably. Since 1980 the rate of expansion has slowed down at all levels with the post-secondary education system and the tertiary system growing at 11.3% and 6.8% respectively. In absolute terms the increases annually are impressive and place a heavy pressure on the capacity of the system to cope with these increased numbers. For instance post-secondary enrolments have increased from 12,989 in 1970 to 48,123 in 1985 while during the same period tertiary and university enrolments increased from 14,937 to 72,068.

As the education system expanded under the impetus of the federal government, the imbalances on ascriptive criteria such as sex, race and region were redressed significantly. The greatest growth was among the previously disadvantaged groups, resulting in a substantial reduction in educational inequality along these dimensions, especially for those schooled in the 1950s and 1960s. This was attributed primarily to a single

factor - the access to schooling - by increasing the number of schools throughout the country. The view that there exists inherent motivational disadvantages in the Malay society or negative attitudes towards schooling was discounted. Educational attainment and continuation ratios in the more developed states where there was good access to schooling for all, revealed no disadvantage to the Malays. In the less developed states where there were fewer primary schools and no secondary schools, there appears to be a clear link between geography and ethnicity. A change of instructional media from English to Bahasa Malaysia also improved the continuation ratios of the Malays. In a single generation the educational inequalities that had fostered the stereotype "the Malay culture did not value education" had been virtually eliminated.*

Enrolments in all levels of schools, as seen in **Table 2** confirm that imbalances in access to schooling had been mostly rectified by 1980. In 1970, the enrolments in primary and lower secondary schools almost reflected the population distribution of the ethnic groups with some under-representation of the Malays at the upper and post-secondary levels. The Malays in 1970 made up only 48.8% of the enrolments at the upper-secondary level and 43.4% at the post-secondary level. At the higher levels the Chinese were over-represented, while the Indians and others together took up 7.8% at the upper-secondary and 7.0% at the post-secondary levels respectively. By 1980, however, the situation had clearly changed; the Malays now constituted 72.3% of the enrolments at the upper-secondary level and 61.0% of the enrolments at the post-secondary level.

The general pattern of educational attendance in Malaysia can be visualised as a pyramid. Despite the impressive growth rates there is a broad base of educational access at the primary level and this tapers off rapidly after this level. In 1980 the primary school enrolments consisted 63.7% of the total enrolments, while lower secondary enrolments were 25.7%, upper secondary and post secondary 8.9% and tertiary enrolments

* C.Hirschman, "Political Independence and Educational Opportunity in Peninsular Malaysia", Sociology of Education, Vol.52, pp.67-83.

constituted only 1.7% of total enrolments (Table 3). By 1985 upper and post-secondary enrolments comprised 10.6% of the total school enrolments while tertiary and university enrolments constituted 2.0% of total enrolments.

4.2 ENROLMENT RATES

Table 4 shows the enrolment rates for all levels of education by age groups and level of schooling for selected years. This is also the age specific participation rate, which is the number of school-going children in a particular age group per 100 of the total population in that age group.

The figures in the table show the tremendous progress made by the public education system since 1960. The rate of participation at the primary level for the age group 6 - 11, increased from 88% to 97% between 1960 and 1980. During the same period the enrolment rate at the Lower Secondary level has shown a dramatic rise from 9% in 1960 to 52% in 1970 and to 82% in 1980. By 1985, 86% of the age groups 12 - 14 were attending Lower Secondary schools. This improvement is largely due to the provision of lower secondary education to as many pupils as possible over the period. Further, the abolition of the secondary school selection examination (MSSEE) in 1964 improved the opportunities for secondary education. Participation rates for upper secondary education have increased more gradually. However, by 1985, 50% of the relevant age group (15 - 16) were in these schools.

At the post-secondary level there has been some modest increase in the enrolment rates over the period, but the university enrolment rates have increased very slowly. However, it must be noted that since 1975 the improvement has been more marked.

The enrolment ratio or the General Enrolment Rate is the proportion of persons aged 7 - 19 years, who are currently enrolled in schools (Standard I to Upper 6), compared with 100 persons in the total population of that relevant age group. Table 5 shows that the overall enrolment ratio has

improved from 67% in 1970 to 74% in 1980. Marked improvements may be noted among previously disadvantaged groups, girls and rural students. Enrolment ratio of girls advanced from 62.4% to 72.5%, while that of rural children increased from 64.1% to 73.4%. The most dramatic change was among rural female students whose enrolment ratio moved up from 59.3% in 1970 to 71.8% in 1980. Some groups were still in 1980 showing a low enrolment ratio. The Indians generally had a low enrolment ratio (66.5%) and the female rural Indian had the lowest enrolment ratio (59.9%). While some of the inter-group differences remain, on the whole all groups experienced an enhanced opportunity for schooling.

A survey of the enrolment rates over this period suggests that the development of primary and lower secondary education has kept pace with the social demand for education at these levels. But after the nine years of common schooling, the education system becomes narrower, selective and elitist. At the upper secondary level only half of the relevant age group are enrolled and this decreases to 7.4% at the post-secondary level and just 4% at the tertiary level.

4.3 EDUCATIONAL ATTAINMENT.

The profile of educational attainment in Malaysia in 1980 by ethnicity and sex is laid out in **Table 6**. The educational attainment of the total population is still very low with 33.2% who have had no schooling, 39.8% with primary schooling only and 15% with lower secondary education and 9.8% with upper secondary education. The proportion of the population with sixth form education and university education is negligible. Significant inter-group differences persist. The Malay and Indian population have a larger proportion with no schooling or primary schooling. Similarly, the female compared with the male population have a higher proportion without schooling or only primary schooling. It must be noted that the educational attainment of the younger age group has improved considerably with the passage of time as was evidenced by the improved enrolment rates at all levels of the school system. (**Table 7**) Nevertheless the low educational attainment of the total population and especially of some groups suggests the need to upgrade the educational attainment of the population.

Secondary and higher education particularly will have to be improved considerably for the next few decades to make a significant impact upon the level of educational attainment of the population.

4.4 DROP-OUT RATES

The holding power of the educational system can be ascertained by studying the rates at the different levels of education. In other words, the progression rates through the various grades of a particular cohort of youths when they first entered the school system would provide the attrition rate or the drop-out rate in the educational system. This educational wastage has been defined as the "incidence in a country's educational system, from the point of view of its efficiency, of factors such as premature school leaving and retardation or repetition".* Since the introduction of automatic promotion in the primary and lower secondary levels in 1961, the major source of educational wastage has been the premature withdrawal of youths from the educational system. Those who dropped out were mainly from the poorer sections of the community, especially from the rural areas. This situation was inimical to the expressed goals of the government to provide equality of educational opportunity for all and to gear the educational system to meet the manpower needs of the economy. A high proportion of these leavers could be expected not to have attained even basic literacy. This represents a serious wastage of scarce resources, which a developing country can ill afford. It also tends to increase the educational expenditure per primary school leaver by two to four times.

The passage of two school age cohorts beginning in 1960 and 1970 is portrayed in **Table 8**. The drop-outs in primary schooling for both cohorts are small, but have improved for the latter cohort. Of the 1960 cohort 17% dropped out before reaching standard 6, while of the 1970 cohort only about 8% dropped out at the same level. The retention rates at the secondary level have shown great improvement with 68.7% of the 1970 cohort still in school at Form III compared with 47.4% of the 1960 cohort at Form III. At

* "The problem of educational wastage", *Bulletin*, UNESCO Regional Office For Education in Asia, Bangkok (March 1967).

the upper secondary level 42% of the 1970 cohort have reached Form V and 6.4% reached Form 6 compared with 23.9% and 3.2% who reached the respective levels from the 1960 cohort. Sex differences in educational wastage have remained but have become less marked.

In 1970 a study (known as the Drop-out Study) was mounted by the Ministry of Education, Malaysia to study the causes of school leaving among primary and lower secondary pupils with the purpose of recommending policies and plans which will improve school retention rates and enhance life chances, most especially for the rural poor.* The study found that the variation in enrolment rates can be accounted for by the socio-economic status (or poverty) of the family, subcultural values of the youths and the characteristics of the schools they attended. The study found that in 1972, among the 15+ age - group, 91% of the youths classified as high on both the parental advantage and socio-economic status scales were still enrolled in school compared to 13% of those classified as low on both these scales. As for the subcultural values, it was found that those youths who had scored low on the modernity index scale were more likely to drop-out than those who scored favourably. It was disproportionately the poor within each community who attended the vernacular schools, which were not as well-endowed as the English schools.

The Drop-out study revealed very little difference in the pattern of attendance between Chinese and Malay youths. But the Indian youths generally had lower rates of enrolments. The Chinese had a slightly higher enrolment rate than the Malays but the overall difference at any point was no more than 3%. The drop-out rate for the Indians in the primary school was substantially higher than the other two groups. The drop-out rates were higher in the rural areas for all community groups and at all socio-economic status level compared with the urban areas. A similar pattern emerged for all socio-economic status groups. In the urban areas the enrolment rates among Malays were substantially higher than the other two communities. In the rural areas a slightly higher proportion of Chinese

* "Malaysia, Laporan Keceran (Drop-out Report), Mistry of Education and Dept. of Statistics, 1973, p.1.

were enrolled to the other two groups. However, it was clear that high drop-out rates occurred among the rural poor of all communities. Systematic data for the more recent period is not available but as the general data on wastage reveals, although the major ethnic, rural-urban and socio-economic groups have experienced improved retention rates, the differences in their capacity to remain in school are still very serious.

5. ASPECTS OF QUALITY

Post-war educational development has concentrated largely on quantitative aspects. Efforts have been directed towards increasing educational opportunities generally and of disadvantaged groups specifically. The 1960's and the 1970's saw very rapid growth of school enrolments and the marked advancement of groups that had previously lagged behind - the rural, female and Malay populations. Attention since 1970 has begun to be diverted towards improvements in the quality of schooling made available to the school population. To keep pace with national development, education no longer aims at mere literacy and numeracy or attendance in school but is expected to meet the manpower requirements and be the major mechanism for human resource development. The rapidly changing context demands the orientation of the school system to provide manpower that will be increasingly productive as well as contribute to the achievement of socio-political development goals.

While there is an optimum level to the quantitative growth of an education system, there is no real limit to the qualitative improvement demanded of an education system. In this respect changes are also more difficult to delineate and assess. However, broad areas that are crucial to quality improvement will be outlined with some indication of the thrust for change that has been or maybe initiated in Malaysia. As stated earlier qualitative improvements cannot be divorced from the issue of access to education because quality education ensures that children are retained in the school system or that school drop-outs are reduced. Thus, the rate of educational wastage provides a powerful measure of the quality of an education system because it is the clearest manifestation of the capacity of a school system to hold its population till it achieves a satisfactory

level of schooling. The educational attainment of the population provides a similar view of the quality of education of a country. Although these aspects have been discussed as issues in the earlier part on access to education, they equally well demonstrate the level of achievement of the education system while drawing attention to the groups that have been victims of poor educational facilities. That the rural, female and Indian community students show the highest drop-out rate clearly suggests that these groups have received an educational experience somewhat inferior to their counterparts.

Central to any exposition of quality education is the concern with the performance of the school population. It has been clearly established that some schools and sectors of the population perform better and are able to pursue schooling to a higher level. A number of studies in the 1970's,* attempted to delineate the factors influencing school achievement. A whole host of variables in the social background of students as well as in the school context were studied. While it may not be possible to alter the social background of students, a number of measures such as text book and nutrition schemes have been suggested to compensate for the deprived socio-cultural background of the home. At the same time a large number of physical features of schools such as double sessions, size of classrooms, amenities and equipment may be improved. While it is difficult to establish a direct relationship between achievement and physical facilities, there is little doubt in the minds of educators that better facilities make learning and teaching more meaningful.

The Malaysian education system has been concentrating on children's development in the cognitive domain measured by performance in examinations. As a result over the last few decades the school system has become extremely examination dominated and studies show that passing well in examinations as an avenue to good employment opportunities provides the

* Drop out study (op.cit.) and studies by Hussein Haji Ahmad, Achievement, social environment and background characteristics in lower secondary schools in Peninsular Malaysia, Ph.D., Stanford University, 1976; Isahak Haron, Social class and educational achievement in a plural society: Peninsular Malaysia, Ph.D., University of Chicago, 1977; T. Marimuthu, The Influence of Home background on the Educational Careers and Aspirations of Tamil Youths in Peninsular Malaysia, Ph.D Thesis, University of Manchester, 1975.

primary motivation to school learning.* The object of the learning is merely passing the examination while understanding, logical thinking, creativity and curiosity are relegated a secondary role. The end, the acquisition of credentials, assume disproportional importance while the learning process becomes unimportant. To overcome some of the ill-effects of this phenomenon that has come to be known as the 'Diploma Disease'**efforts have recently been directed at giving importance to co-curricular activities by taking cognizance of them in the total assesment of the pupils' activities and performance in schools. Such moves may in the long term make a difference in the school experience emphasising qualities and values other than those presently receiving importance in school and in the labour market.

An assesment of the achievement of the stated objectives of the education system may provide insights into the educational process. Policy statements in Malaysia advocate moral development, citizenship education and the development of the total child according to his aptitude. Parallel to these are objectives of national unity and integration vital to the survival of the nation. All these diverse objectives have been translated into school strategies through the curriculum and co-curricular activities. An assesment of quality must take cognizance of the type of individual that the system produces. In brief the concern in education must to a very large extent turn to the affective domain. Attempts to develop the affective domain of our children through the school system have only recently come into the limelight as evidenced through the development of moral education, citizenship education curricula and the systematic formulation of co-curricular activities.

The education system may further be scrutinised for its ability to achieve very specific objectives. In Malaysia, for instance, there are the objectives to train scientific and technical manpower. Some efforts have been made to assess the outcomes of this policy in terms of the numbers of

* T.Marimuthu, Hena Mukerjee and J.S.Singh, Student Learning Orientation Report, Faculty of Education, University of Malaya, 1984, 1985.

** R.Dore, The Diploma Disease: Education, Qualification and Development, London, Allen and Unwin, 1976.

such persons as well as the successful acquisition of scientific and technological skills by the products of the school system. Question of relevance of schooling for the work force have been raised and criticism levelled at the inability of the education system to train and supply a work force with the skills, abilities and attitudes relevant to the modern industrial society envisaged for Malaysia. However, sufficient attention has not been detailed to the cultivation and promotion of scientific skills and mode of thought.

A group of factors pertaining to the quality of education evolve around the school curriculum. Curriculum ranges from the renewal of content in the syllabus, updating and improving instructional materials to the complete revamping of the instructional processes. An example of the last was the introduction of the Kurikulum Baru Sekolah Randah (K.B.S.R.) in 1981. Shifts in emphasis in school subjects have to be considered. Schools in Malaysia have moved into comprehensive secondary education at the Lower Secondary Level providing a wide exposure to all subjects. The emphasis in the upper secondary has moved towards science and technology in pace with the policies of modernization and industrialisation. The efficacy of the curriculum is a major determinant of the quality of education.

A final group of factors that impinge upon quality of education are teacher variables and related aspects of pedagogy. The whole phenomenon of teacher training has to be considered. Interest is in both pre-service training and in service training, an area in which Malaysia has done little. The minimum qualification of the teaching force may be increased and opportunities provided for continual renewal of both the content of the teacher as well as the teaching methods. Teachers run a race against knowledge explosion and new educational technology. The teaching-learning process itself has been the subject of close scrutiny with emphasis shifting from teachers being the fount of all knowledge to teachers becoming facilitators, managers and organisers of learning. The state of knowledge no longer enables teachers to impart all necessary information but merely enables them to teach pupils to learn. The basic acquisition of the tools for learning are just as important as the basic concepts of a discipline. Any contribution that enhances the learning process improves

As is evident the numerous dimensions of the quality of education make a review of the improvements in quality difficult to document. Nevertheless, the major issues involved in such an evaluation have been discussed. Historically, concern with quality is more recent. It is sufficient perhaps to state that the scope is vast and the work that needs to be done immense.

6. CONCLUSION

It is evident from the discussion so far that Peninsular Malaysia now possesses a fairly well developed educational system catering for a large proportion of the population between the ages of 7 -19 years. The youths in this age group represent the school-going population both at the primary and secondary levels. In 1980, the enrolment ratio for this group was 73%. At the primary level, over 95% of the eligible population was enrolled in schools and at the lower secondary level the enrolment ratio was above 80%. These figures illustrate the impressive progress made by the educational system in the last three decades. The enrolment rates as well as the retention rates have improved impressively over the period. The democratisation of primary and lower secondary education has made it possible for every child to have a nine year uninterrupted formal schooling, if he desired it. Although education is not compulsory, near universal primary education has been achieved and the enrolment rates at the secondary level have been rising steadily over the years.

Although every child is given equal opportunity of access to education for nine years, inequalities in educational opportunities still remain. The Drop-out Report pointed out that the attrition rate amongst the poor especially the rural poor was the highest. There were inequalities in educational provision between rural and urban areas, between vernacular and secular schools and between the different states in the country. There are still "smallest and poorest" schools in the educational system. The quality of education imparted in these schools leaves much to be desired. The pressure of the increasing school age population has also created other

problems such as increasing class size, double sessions in schools especially in the urban areas resulting in a reduction in school hours and the recruitment of untrained teachers who were provided training during week-ends and term holidays. Curriculum reform and strategies that improve the learning process to develop both the cognitive and affective domains of our school children have only recently gained importance. In the effort to provide coverage, the qualitative aspects of education had received lower priority.

Table I : School Enrolments 1960 - 1985

	1960	1965	1970	1975	1980	1985	Annual % Increase		
							1960-1970	1970-1980	1980-1985
Primary	1,130,539	1,217,309	1,679,798	1,890,974	2,006,760	2,190,468	4.9	1.9	1.8
Lower Sec.	120,837	231,555	432,703	643,073	812,105	918,272	25.8	8.8	2.6
Upper Sec.	34,572	42,163	99,637	178,313	248,543	327,158	18.8	14.9	6.3
Post Sec.	1,556	3,537	12,989	20,895	30,797	48,123	73.5	13.7	11.3
Tertiary/University	1,201	12,965	14,937	37,199	53,884	72,068	114.4	26.1	6.8
Total	1,288,705	1,507,529	2,240,064	2,770,454	3,152,098	3,556,089	7.4	4.1	2.6

Source: Third and Fourth Malaysian Plans for 1960 - 1980.
Educational Planning and Research Division (EPRD) for 1985.

Table 2 : Peninsular Malaysia - Enrolments by Race and Level of Education, 1970-80
(% Distribution)

Level	1970					1975					1980				
	Malay	Chinese	Indian	Others	Total	Malay	Chinese	Indian	Others	Total	Malay	Chinese	Indian	Others	Total
Primary	53.4	36.0	10.0	0.6	100.0	55.2	34.7	9.6	0.5	100.0	56.9	33.2	9.4	0.5	100.0
Lower Sec.	51.0	38.8	9.6	0.6	100.0	54.4	35.4	9.7	0.5	100.0	57.2	33.2	9.2	0.4	100.0
Upper Sec.	48.8	43.4	7.0	0.8	100.0	60.7	32.4	6.2	0.7	100.0	72.3	20.4	6.8	0.6	100.0
Post Sec.	43.4	49.6	6.0	1.0	100.0	54.0	40.5	4.9	0.6	100.0	61.0	30.2	7.9	0.9	100.0
Distribution of Population	53.0	35.6	10.6	0.8	100.0	53.0	35.6	10.6	0.8	100.0	58.1	32.3	9.1	0.5	100.0

Source : Third Malaysia Plan 1976-1980, p.400.
Population Census, 1980.

Table 3 : School Enrolments (Percentage Distribution)
by Level 1960 - 1985, Peninsular Malaysia.

Level	1960 % of Total	1965 % of Total	1970 % of Total	1975 % of Total	1980 % of Total	1985 % of Total
Primary	87.8	80.7	75.0	68.3	63.7	61.6
Lower Sec.	9.4	15.4	19.3	23.2	25.7	25.8
Upper Sec.	2.7	2.8	4.4	6.4	7.9	9.2
Post Sec.	0.6	0.2	0.6	0.8	1.0	1.4
Tertiary	0.02	0.2	0.6	0.8	1.1	2.0
University	0.02	0.2	0.3	0.5	0.6	2.0

Source: Second, Third and Fourth Malaysia Plan

Table 4 : Enrolment Rates by Educational Level And Age

Year	Primary 6+ - 11+	Lower Sec. 12 - 14+	Upper Sec. 15+ - 16+	Post Sec. 17+ - 18+	University/ Tertiary 19+ - 24+
1960	87.8	9.6	2.7	0.06	0.04
1970	88.2	52.4	10.1	3.1	0.6
1975	96.0	69.5	21.6	6.9	1.5
1980	96.8	81.7	36.1	4.3	2.4
1985	100.0	86.3	50.1	4	4.0

Source: EPRD, Educational Statistics, 1957 - 1979.
EPRD, 1980 - 1985 - Unpublished.

* Data for 1960-70 refer to Peninsular Malaysia, while data for 1980 and 1985 refer to Malaysia.

Table 5 : Percentage Distribution of Population Aged 7-19 years currently in School by Community, Sex and Strata : Peninsular Malaysia, 1970 and 1980.

Community Groups	Urban			Rural			Total	
	Male	Female	Total	Male	Female	Total	Male	Female
Malay (1970)	81.8	74.1	78.0	69.1	61.0	65.0	71.1	63.0
Malay (1980)	78.5	75.8	77.1	76.2	73.2	74.7	76.7	73.8
Chinese(1970)	77.5	68.7	73.2	71.4	60.7	66.2	74.3	66.5
Chinese(1980)	74.6	73.3	74.0	74.9	72.7	73.8	74.7	73.1
Indian (1970)	75.4	65.4	70.5	61.3	46.2	53.8	66.1	52.5
Indian (1980)	72.5	68.8	70.7	67.7	59.9	63.8	69.6	63.4
Others (1970)	95.2	87.2	91.1	56.3	47.1	51.8	71.1	63.2
Others (1980)	81.2	77.7	79.4	60.8	57.3	59.1	68.8	65.4
Total (1970)	78.6	70.0	74.3	68.8	59.3	64.1	71.7	62.4
Total (1980)	75.9	73.9	74.9	75.0	71.8	73.4	75.3	72.5

Source : General Report : Population Census of Malaysia, 1970 and 1980.

Table 6 : Percentage Distribution of Educational Attainment, Ethnicity and Sex.
Peninsular Malaysia 1980.

	Malay	Chinese	Indian	Male	Female	Total
No Schooling	34.8	30.7	32.3	28.2	38.2	33.2
Primary	39.3	41.0	38.9	41.9	37.7	39.8
Lower Sec. (Form I-III)	14.5	17.4	19.2	17.6	14.3	15.0
Upper Sec./ Vocational (Form IV-V)	10.1	9.5	8.3	10.8	8.7	9.8
Form 6	1.3	1.3	1.2	1.5	1.1	1.3
Total	6,033,656 100.0	3,582,016 100.0	1,074,742 100.0	5,331,875 100.0	5,419,291 100.0	10,751,166 100.0

Table 7 : Percentage Distribution of Population by Educational Attainment and Age Group
1970 and 1980, Malaysia.

Age Group	No Schooling 1970	No Schooling 1980	Primary 1970	Primary 1980	Lower Secondary 1970	Lower Secondary 1980	Upper Sec. and Above 1970	Upper Sec. and Above 1980	Total
5 - 9	40	38	60	62	-	-	-	-	100.0
10 - 14	8	4	70	58	22	38	-	-	100.0
15 - 19	11	7	44	21	29	38	16	34	100.0
20 - 29	21	11	54	39	12	23	14	27	100.0
30 - 39	40	22	48	51	5	12	7	15	100.0
40 - 49	54	42	40	46	3	6	3	7	100.0
50 - 59	64	56	31	37	2	3	3	3	100.0
60 and above	75	73	22	23	1	2	1	2	100.0
Total	33	25	51	44	10	18	6	13	100.0

Table 8 : Educational Wastage, 1960 and 1970 Cohorts

	Cohort 1960			Cohort 1970		
	Male	Female	Total	Male	Female	Total
Std. I	100	100	100	100	100	100
2	99.5	99.2	99.4	99.1	99.2	99.2
3	99.5	97.9	98.7	97.5	98.1	97.8
4	97.7	93.0	95.5	97.1	96.0	96.6
5	94.0	85.7	90.2	95.2	94.4	94.8
6	88.8	76.6	83.1	94.9	91.9	93.5
Form I	87.7	63.4	76.4	-	-	72.3
II	58.1	43.4	51.3	-	-	70.1
III	52.9	41.0	47.4	-	-	68.7
IV	26.1	20.4	23.4	-	-	-
V	27.0	20.4	23.9	43.4	41.2	42.3
L	3.6	2.7	3.2	5.9	6.9	6.4
U	3.6	2.6	3.2	4.0	5.3	4.6